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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,622	07/03/2001	John G. Apostolopoulos	10012162-1	5149

7590

09/21/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

HOSSAIN, TANIM M

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,622

Applicant(s)

APOSTOLOPOULOS ET AL.

Examiner

Tanim Hossain

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 9, 11-15, 18, 20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kubota (U.S. 2002/0154703).

As per claim 1, Kubota teaches a method for streaming media data to a client, said method comprising: encoding an item of content comprising media data to be streamed to said client into a first multiple description bitstream and into a second multiple description bitstream, wherein said first multiple description bitstream and said second multiple description bitstream are decodable independent of one another (paragraphs 0014-0023); and distributing concurrently said first and second multiple description bitstreams to a plurality of servers placed at intermediate nodes throughout a network, such that said first and second multiple description bitstreams are provided to said client via a plurality of transmission paths (0014-0023).

As per claim 2, Kubota teaches the method for streaming media data to a client as recited in claim 1, wherein said encoding further comprises: encoding said item of media data into a first and second complementary multiple description bitstream wherein each of said first and

second complementary multiple description bitstreams contains complementary information (0014-0023).

As per claim 3, Kubota teaches the method for streaming media data to a client as recited in step a) of claim 1, wherein said item of media data is encoded into a first and a second complementary multiple description bitstream wherein each of said first and second complementary multiple description bitstreams is of substantially equal importance during decoding (0014-0023).

As per claim 4, Kubota teaches the method for streaming media data to a client as recited in claim 1, wherein said encoding further comprises: encoding said item of media data into a first and a second complementary multiple description bitstream wherein each of said first and second complementary multiple description bitstreams does not include encoded media data that is included in the other of said first and second complementary multiple description bitstreams (0014-0023).

As per claim 5, Kubota teaches the method for streaming media data to a client as recited in claim 1, wherein said item of media data is selected from the group consisting of audio-based data, speech-based data, image-based data, graphic-data, and web page-based data (0014-0023).

As per claim 6, Kubota teaches the method for streaming media data to a client as recited in claim 1, wherein said distributing further comprises: distributing said first multiple description bitstream to a first server and distributing said second multiple description bitstream to a second server (0014-0023).

As per claim 9, Kubota teaches the method for streaming media data to a client as recited in claim 1, wherein said method does not require complete duplication of said media data in order to achieve path diversity (0041).

As per claim 11, Kubota teaches a method for achieving reliability and efficiency and for reducing single points of failure in the streaming of media data to a client, said method comprising the steps of:

a) encoding an item comprising media data to be streamed to said client into a first complementary multiple description bitstream and into a second complementary multiple description bitstream, each of said first and second complementary multiple description bitstreams containing complementary information not included in the other of said first and second complementary multiple description bitstreams, and wherein each of said first and second complementary multiple description bitstreams is useful to said client independent of the other of said first and second complementary multiple description bitstreams; (0014-0023); and

b) distributing concurrently said first complementary multiple description bitstream and said second complementary multiple description bitstream to a plurality of servers placed at intermediate nodes throughout a network, such that said first and second multiple description bitstreams are provided to said via a plurality of transmission paths (0014-0023).

Claims 12-15, and 18 are rejected on the same bases as claims 3-6, and 9 respectively, as claims 12-15, and 18 teach a method of implementing claims 3-6, and 9 respectively.

As per claim 20, Kubota teaches a system for streaming media data to a client, said system comprising: a first server having memory coupled thereto, said first server adapted to be coupled to a network, said memory coupled to said first server having a first multiple description

bitstream of encoded said media data stored thereon, said first server adapted to transmit said first multiple description bitstream of encoded said media data to a client via a first path (0014-0023); and a second server having memory coupled thereto, said second server adapted to be coupled to said network, said memory coupled to said second server having a second multiple description bitstream of encoded said media data stored thereon, wherein said first multiple description bitstream and said second multiple description bitstream are decodable independent of one another, said second server adapted to transmit said second multiple description bitstream of encoded said media data to said client via a second path, said first and second servers concurrently transmitting said first and second multiple description bitstreams such that said first and second multiple description bitstreams are provided to said client via a plurality of transmission paths (0014-0023).

As per claim 21, Kubota teaches the system for streaming media data to a client of claim 20, further comprising: a content server coupled to said first server and said second server, said content server adapted to provide said first multiple description bitstream of encoded said media data to said memory coupled to said first server, said content server further adapted to provide said second multiple description bitstream of encoded said media data to said memory coupled to said second server (0014-0023).

Claim 22 is rejected on the same basis as claim 5, as claim 22 is a system for implementing the method of claim 5.

Claims 7, 8, 10, 16, 17, 19, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota in view of Gershman (U.S. 6,401,085).

As per claim 7, Kubota teaches the method for streaming media data to a client as recited in claim 1, but does not specifically teach that the receiving client is a mobile client. Gershman teaches the limitation that the receiving client is a mobile client (column 3, lines 14-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to include this limitation, as taught by Gershman in the system of Kubota, as they are both from the same field of endeavor, namely the efficient reception of services over the Internet. The existence of Internet capability on mobile devices is well known in the art, and its specific inclusion into Kubota's invention allows for further diversity and efficiency.

As per claim 8, Kubota-Gershman teaches the method for streaming media data to a client as recited in claim 7, wherein the step comprises: distributing said first and second multiple description bitstreams to servers placed along a wired/wireless gateway (Gershman: column 3, lines 14-28; where the existence of wireless communication constitutes the existence of a wireless gateway system; Kubota: 0001).

As per claim 10, Kubota-Gershman teaches the method for streaming media data to a client as recited in claim 1, wherein said method is performed in a network system selected from the group consisting of: wired and wired networks; wired and wireless networks; wireless and wired networks; and wireless and wireless networks. The existence of a fully wired network, as taught by Kubota, and the capability of a fully wireless network as taught by Kubota-Gershman, or any combination thereof, allows for the capability for there to exist any combination of wired and wireless interfaces. The different combinations constitute design choices and the teaching thus obvious to one of ordinary skill in the art at the time of the invention.

Claims 16, 17 and 19 are rejected on the same bases as claims 7, 8 and 10 respectively, as claims 16, 17 and 19 teach a method of implementing claims 7, 8 and 10 respectively.

Claims 23 and 26 are rejected on the same bases as claims 7 and 10 respectively, as claims 23 and 26 teach a system for implementing the contents of claims 7 and 10 respectively.

Claims 24 and 25 are rejected on the same basis as claim 8, as claims 24 and 25 constitute a system for implementing the contents of claim 8.

Response to Arguments

Applicant's arguments filed on August 29, 2005 have fully been considered, and are respectfully traversed by the new grounds of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571/272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanim Hossain
Patent Examiner
Art Unit 2145



RUPAL DHARIA
SUPERVISORY PATENT EXAMINER